DOCUMENT RESUME

ED 203 276 CS 005 790

AUTHOR Quattrini, Joseph A.
TITLE Improving Reading Instruction to the Inclusion of Everything Else.
PUB DATE [79]
NOTE 92p.

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS English Instruction; *Faculty Development; High Schools; Inservice Education; *Instructional Improvement; Minimum Competency Testing; Norm Referenced Tests; Program Evaluation; *Reading Comprehension; *Reading Instruction; Reading Teachers; Teacher Education; *Teacher Workshops; Test Results

ABSTRACT

The problem of a perceived decline in secondary school students' reading comprehension and the efforts of one high school English department head to address that problem are described in this paper. The first section of the paper presents an extensive documentation of the decline in reading comprehension and of reactions by state and local agencies to that decline, including the introduction of minimum competency testing. The second section begins by citing examples that point either to no decline or to an improvement in education in the past decade, continues with research findings that suggest alternative reasons for lower test scores, and concludes that inadequate teacher training is the key to the problem. Objectives for an inservice teacher workshop on reading instruction are briefly outlined in the third section, followed by a detailed proposal in the next section for implementing such a workshop. The fifth section describes the reading workshop conducted over a five-week period for seven high school English and reading teachers. An evaluation of the workshop, observations, recommendations, and the conclusion that such inservice programs may be an effective means of encouraging staff development make up the final section. Appendixes include surveys of the high school staff, pretests and posttests used in the workshop, and workshop overview and objective statements. (AEA)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☒ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED203276

IMPROVING READING INSTRUCTION TO THE INCLUSION OF EVERYTHING ELSE

Joseph A. Quattrini

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Joseph A. Quattrini

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CS005790

Improving Reading Instruction
to the Inclusion of Everything Else

Table of Contents

Cover Sheet.....i.

Abstract.....ii.

Table of Contents.....iii.

Observer's Verification.....iv.

Chapter 1 - Description and Documentation of the Problem.....1.

Chapter 2 - Analysis of the Problem.....11.

Chapter 3 - Operational Objectives and Means of Evaluation...36.

Chapter 4 - Solution

a. Alternative Strategies.....40.

b. Strategy to be Implemented.....45.

c. Implementation Plan.....50.

Chapter 5 - Action Taken.....53.

Chapter 6 - Evaluation

a. Data and Analysis Related to Operational Objectives.....58.

b. Incidental Observations and Recommendations.....67.

References.....74.

Appendices

A. Staff Surveys.....79.

B. Pre-test/Post-test Package.....82.

C. Overview and Objective.....88.

Description and Documentation of the Problem

The problem with which this practicum is concerned occurs in several contexts: local, state, and national. It affects public and private education in every state at every level, from pre-school to post-graduate, and it may have international consequences as well. The specific local context which particularly concerns me will be described later. As it is impossible in this case to separate the problem from its effects, they will be discussed together.

The Problem: There is a perceived diminution of students' ability to read and comprehend the language.

Local level:

In the classroom, content-area teachers report that students are unable to understand questions, unable to answer multiple-choice questions, and unable to work independently because of reading difficulties. Responses to an informal survey (Appendix A) include the following examples of perceived reading problems at the local level.

A science teacher reports students unable to follow written directions for labs, although they can follow the same directions when they are read aloud.

A history teacher reports students unable to distinguish between fact and opinion, news and editorial approaches.

A math teacher reports students unable to determine what word problems require of them; students get incorrect answers or no answers at all, not because they cannot handle the math processes, but because they ignore such signal words as "each," "both," etc.

A typing teacher reports students failing Regents Competency Exams in typing because they can't take handwritten material which is spelled correctly and type from it a correctly-spelled manuscript. Nor can they use dictionaries effectively for aid in spelling or syllabication.

A driver education teacher reports students unable to fill out forms for licenses and registrations by following the directions in an accompanying booklet.

A home economics teacher reports students unable to complete sewing projects because of inability to follow written pattern directions.

A research and design teacher reports students unable to use the library effectively as an information resource.

An English and reading teacher reports students' average reading speeds and comprehension levels are far below potentials.

Another survey (Appendix A) asked local teachers to assess the importance of reading to learning in their content areas and to assess their training in teaching reading. The seventeen subskills listed represent the five major skills of reading. The results showed that most subskills of reading

are considered important to learning in all content areas. Two/thirds of the responses on the importance scale were above the median figure, were 4's and 5's. On the training scale, however, less than one/half of the responses were above the median figure. Perhaps the training of teachers has emphasized the subject area's content rather than ways of structuring or learning that content.

Responses to the training scale must be interpreted with some caution, as must be those from any self-report instrument which asks questions in such a sensitive area as competency, training, and skill. Several papers were not considered because the subjects took one or two minutes to circle 5's on all items without reading the items first.

By comparing results on the importance/training survey and the informal survey, two conclusions may be drawn:

1. The importance of reading is recognized by teachers in all areas.

2. There is a felt need for help in the form of reading instruction, although the problem may be viewed as more the students' problem than the teachers'.

At the local level in general, there are several other indicators:

The number of non-regents (general diploma) students is increasing annually.

Vocabulary books used ten years ago are now deemed too difficult for students at the same grade levels.

Special remedial vocabulary has to be taught in each course, words that teachers used to take for granted as being familiar to students.

SAT score averages for the last four years are down about 40 points and 30 points for verbal and nonverbal, as compared with the 4-year average from 1968-71.

Teachers report increased time expenditures in explaining and answering questions about written directions for classwork, tests, and homework assignments.

Last year's local school budget was defeated three times.

State level:

The school board of the city of New York was ordered to pay for the education of a 21-year-old or to place him in a remedial program. Although the youth had attended school for 12 years, he lacked functional literacy skills and could not fill out a job application (3).

The State Education Department has scrapped the old English curriculum which took about fifteen years to develop and has appointed a task force to develop a new one within a year or so.

In response to public pressure, the state has also scrapped its first effort toward minimum competency tests and has started all over again with a new battery of tests which a student must pass in order to graduate. The new tests are in reading, writing, and mathematics.

State mandates for remediation for disadvantaged groups

have been extended to cover larger segments of the total school population.

There is a flurry of activity at the state level, especially with respect to press releases and communications to local districts, indicating the state is running scared because of the pressure of public opinion. Bureaucracy responds in this manner only when threatened.

Teacher preparation has also been influenced. When value clarification was a popular element, sometimes the primary element, in curriculum design for secondary schools, it also became an important element in curriculum design for colleges which prepared teachers. In the past several years, however, teacher preparation programs have become more rigid in structure, showing the same tendency as secondary programs: both have returned to the core approach. Several years ago, a student in teacher preparation at a state university might have been required to take X number of credit hours (in almost any areas) and to complete student teaching in order to receive a teaching license. For a time, classroom teachers were reluctant to accept student teachers with such preparation because they and their supervisors had such radically different standards from those of their cooperating teachers. Now, teacher preparation is heading in the other direction. In fact, the eventual outcome has been proposed for years but is now gaining more support: competency exams for candidates for teaching licenses, called competency-based certification.

New York recently cancelled reciprocity agreements for teacher licensing with Pennsylvania and other states, as if this raised our standards or improved instruction. It is also much more difficult to do out-of-state graduate work: witness my difficulty in getting a definite answer from anybody regarding recognition of Nova'a accreditation (it took ten months to get an answer in writing). Local and tri-county districts and the state have all retrenched, as if retrenchment meant improvement, because of pressure from the public.

School budgets in New York are being defeated with increasing regularity: three times as many were defeated in '78 as in '68 (33). Newspaper articles and editorials indicate an erosion of confidence in the job done by the public schools.

We seem to have ridden off in all directions at once. We are making textbooks simpler, but standards higher, as if the new standards were improvements in and of themselves. We are making the curriculum more rigid, going back to basics, adding reading instruction time (by mandate), making reading tests tougher because students can't read, and making diplomas harder to get. As I write this, the state makes a new ruling: students who fail to pass minimum competency exams or regents exams (more difficult than MC exams) will receive nothing after thirteen years of school -- no local diploma, no certificate of attendance,

no nice try, nothing.

National level:

Over one/third of the students in an eighth grade class in Richmond, Virginia, were held back when it was discovered that they were behind grade level performance by as much as three years (3).

A San Fransisco school was hauled into court for gross negligence and fraud, for failing to give Peter Doe an education. Despite his inability to read at a fifth-grade level, the student was graduated from high school (28).

The Carnegie Foundation for the Advancement of Teaching, in a 312-page report, stated that general education, education for a broad range of skills, is "a disaster area" in American colleges and universities (47).

According to the U. S. Office of Education, twenty-three million Americans are functionally illiterate (28).

SAT score averages for the last four years are down about 30 points and 20 points for verbal and nonverbal, as compared with the four-year average from 1968-71. A blue-ribbon panel was appointed to study the decline and draw conclusions.

ACT scores for students applying to colleges have been declining (28).

According to the National Assessment of Education Progress, from 1969 to 1973 American students showed a decline in science knowledge equivalent to half a year's learning (28).

News and journal publications by college professors declare students' reading and writing abilities are not what they used to be.

Textbook publishers have been continually revising books toward simpler reading levels, and have at least tripled their offerings in basic reading and writing texts and workbooks (for secondary schools) in the past few years.

At Ohio State University over one/fourth of the entering freshmen had not mastered basic math and writing skills (47).

Many colleges and universities have instituted freshman courses in remedial reading and writing.

Surveys comparing writing skills of 13- and 17-year-olds from 1970 to 1974 show more recent students write with a more limited vocabulary and a shorter, simpler style (28).

The Gallup Polling Organization's annual nationwide survey of the public's attitude toward schools has in recent years shown a steady decline in adults' ratings of the schools (25).

A last major part of the problem, and it is both an effect and a cause of further problems, is the haste with which decisions are being made under the impetus of public pressure. The public is becoming convinced that students are deficient in basic skills, and this is resulting in a lack of confidence in public schools and those responsible for their administration. Lack of confidence leads to lack of support, financial or otherwise. In an age of accountability, people want proof that the schools are doing their

job, whatever it is they believe that job to be. When standards which are perceived by the public as indicators of students' and schools' performance show a downward trend, the "no frills" cries begin. If the present attitude toward schools and education continues, unless there is concrete evidence that such drastic measures are unnecessary, we will all be teaching thirteen years of The Three R's. Since the trend seems to be toward more instruction, and not better instruction, the R's will be taught at the expense of something else.

A clear example of the hasty decisions being prompted by public discontent is the new battery of minimum competency tests in New York. The tests are being imposed immediately. On the reading test, follow-up research is less than complete, but pressure from the public, and then from the Regents on the testing division of the State Education Department, has caused the new standard to be applied immediately. Apparently the conclusion has been drawn that immediate application will result in immediate upgrading of reading ability and instruction.

As told to me by a professional researcher in the State Education Department, the new exam is based on a "new theory of reading comprehension, one which seems to hold water." It measures "whole powers of comprehension." Unfortunately, the new theory, and now the new test, have preceded new instructional techniques. Since such widely publicized measures tend to be equally widely interpreted and also

misinterpreted, and since graduation for many students is now contingent upon passing the exams, this new exam poses a real and immediate problem for districts in New York State. Since instructional leadership from the state does not seem to be forthcoming, local districts, mine included, will have to provide their own.

Analysis of the Problem

Much of the above is not evidence of a decline; it is, rather, evidence of a perceived decline. Part of the problem is that there is no clear view of the problem, and, therefore, no clear view of the solution. Although it seems to be taken for granted, particularly by the media, that the decline is real, there is perhaps as much evidence which points to no decline or even to an improvement in education in the past decade or so. To cite a few examples for each level:

Local level:

3rd- and 6th-grade Pupil Evaluation test scores in reading have increased steadily for the past seven years. Last year only 5% of our students were below predicted grade levels.

Local students continually outperform other area students in winning Regents Scholarships, often winning twice as many as students from equal or larger districts.

The percentage of local students accepted in 2- and 4-year colleges has not decreased.

Student performance on state-administered regents examinations has not declined.

More students are staying in school longer.

State level:

The Westinghouse Science Talent Search selected ten students from the country as top scholarship winners. Five of the ten were from New York. Of the forty finalists from whom the winners were chosen, fifteen were from New York (59).

A study based on the results of the National Merit Scholarship Exam showed that, on a per student basis, New York had twice as many National Merit Commended Seniors as did California (42).

Although there may be no valid comparisons based on nationwide school-administered tests, the College Board exams taken by high school seniors across the country show that scores from New York consistently lead both California scores and national averages (42).

National level:

In a recent Gallup poll, 55% of the students surveyed gave their own schools an A or B rating (25).

An NAEP report indicates that over the past five years 9-year-olds showed increased achievement in reading, and 13- and 17-year-olds showed no decrease (41).

The same report indicated that the most disadvantaged groups made the most substantial progress, suggesting that basic skills are being taught effectively (41).

The percentage of illiterates in the U. S. dropped from over 10% of the population (10 years or older) to only 1% of the population (14 years or older) (11).

A study in Florida indicated that the reading ability of college students has increased (30).

Studies in Iowa, Indiana, and many other states have shown either equal or better performance of today's students when compared with students of the past.

A recent study has found a direct relationship between the amount of education a person has and a life-long tendency toward "information seeking" and "receptivity to new knowledge" (37).

International level:

In an international study of student performance in reading and literature, the U. S. showed the highest percentage of students performing competently (41).

What is going on? Has the performance/achievement/competence of students/teachers/schools actually increased/decreased/remained constant? This is, in a sense, a heuristic question: if we cannot step into the same river twice, we can hardly expect to make a definitive comparison of different students taught by different teachers in different schools during vastly different times and circumstances. Even though there is no consensus about the reality of a decline, myriad causes of it have been suggested. One scientist has even suggested that children born in the late 1950's and early 1960's may have diminished learning ability because of radioactive fallout. Dr. Ernest Sternglass of the University of Pittsburgh School of Medicine told a recent nuclear power conference that extensive aboveground

nuclear testing during those years could have produced a generation of impaired learning ability (58). By extension of that argument, the decline should reverse itself when children born after those years reach late secondary school and college.

To return to the problem for a minute, I think it is true that we live in a world of perceived reality, both individually and collectively, and reality in education is whatever people believe it to be. Many causes, some within the schools, some without, are responsible for changes in education and changes in <u>attitude</u> toward education. A decline is perceived (even measured) by some, but factors have not necessarily led to a measurable increase or decrease in performance, although they may have contributed to changes, some of them drastic, in views toward education held by students, parents, educators, and the general populace. What follows, then, is an examination of the causes of change, not solely the causes for increase or decrease in performance.

Since the decline in SAT scores seems to be universally known, if not understood, this is a logical place to begin. In 1976 a special panel was set up by the College Entrance Examination Board to investigate the reasons for the steady decline in scores over the past dozen years. The panel's report, released in 1978, cited an interesting array of causes, beginning with the finding that the composition of the population of students taking the test has changed greatly.

The panel concluded that six other developments contributed to the decline in scores:

1. ...A significant dispersal of learning activities and emphasis in the schools, reflected particularly in the addition of many elective courses and the reduction in the number of courses that all students are required to take.

2. ...Diminished seriousness of purpose and attention to mastery of skills and knowledge in the schools, in the home, and in society generally.

3. ...The fact that most children have spent more time watching television than they have spent in school has detracted from homework, has competed with schooling, and has contributed to the decline in the score averages.

4. ...The role of the family in the educational process has changed.

5. ...The disruption in the life of the country during the period from 1967-75 probably made quite a difference.

6. ...The committee found diminution in young people's learning motivation, and this followed very closely the curve of the entire nation's self-esteem and sense of purpose (22).

Many other researchers and writers have addressed themselves to the SAT score decline (it now has the status of a compound noun in educational jargon). A study published in Educational Technology suggested several other factors including increased test anxiety combined with decreased test motivation, more students of lower ability taking the test, and, most important (in my view), a lack of correspondence between what schools now teach and what the SAT tests (54).

A National Academy of Education panel created at the behest of Mary F. Berry, Assistant Secretary for Education (HEW), found contributing factors within the schools:

1. The proliferation of courses available to pupils

in upper elementary, junior and senior high schools and the options of students for less demanding courses than the traditional regimen of English, math, science, and social studies.

2. ...A variety of new teaching approaches...rarely accompanied by teacher training and professional development programs for adequate and effective implementation. Floundering teachers vacillated between what they knew how to do and what they were more and more expected to do with little preparation.

3. On task instructional and learning time decreased in the classroom. Some studies suggest that even in relatively good classrooms, students are on task for only 30% of the instructional day, and the instructional day in a good classroom is devoted to learning only 60-70% of the time.

4. ...The dismantling of opportunities for intensive study in selective academic environments at the secondary level. In city after city, programs for the academically talented have been closed or forced to accept changed admission standards. Islands of excellence in our public schools are rarer today than 20 years ago (3).

For a time, colleges were eliminating English, math, and foreign language requirements for their students. As so often happens, the residual effects were felt at the secondary school level. These courses, no longer seen as keys to college admission (and many students believe that is their only purpose in high school), suffered declining enrollments. Some schools, who apparently felt that their only purpose was to train people for college, reasoned that if the courses were unnecessary in college, why make them requirements in high school?

Arthur E. Wise, former associate director of the National Institute of Education, narrows the whole issue to a single sentence: "A minority of students fail to acquire the basic skills; a minority of teachers fail to

teach the basic skills" (55). Members of these minorities are constantly pointed out as examples of the incompetent, those who cannot fill out a job application, make change, or perform other simple tasks.

As suggested by different patterns of answers to survey questions about education, students and adults tend to evaluate schools by different standards. Students, for one thing, have no "good old days" with which to compare the present. Adults seem to base their judgments on experiences of ten, twenty, thirty, even forty years ago. For them, quality equals academic performance. They tend to forget that our schools are faced with the development of the total child, including emotional and social develment (25). Schools are asked, sometimes even required by law, to attend to areas of development that used to be the domain of the family unit and the church.

Another change in society is the glorification of young adulthood, the push for "the good life" for adolescents. It has changed students' views of themselves and of education, and has made necessary other changes in school policies and practices. Children insist on having the full rights and privileges of adulthood at an earlier and earlier age. Many students say they <u>have</u> to work in order to support the affluent life-style they believe, and are led to believe by advertisers everywhere, they must have. If a student pays $2000 for a Firebird and then $800 a year

for insurance, he does have to work, at least part-time. Then he has to drive to work and to school, of course, which costs more money, so maybe he needs to work a few more hours, and so on.

When a teacher tries to do all he can for a student, to "meet him where he is," regardless of attendance, the plan for the course gradually changes. There can be very little homework, because students don't have time to do it. Many are not there to receive it on Monday (my boss called) or to turn it it on Tuesday (car trouble, you know). The course tends to become programmed into one- or two-day units which can be plugged in anywhere, depending on who is in attendance, and the teacher must settle for teaching skills in isolation (if he is able to accomplish even that), rarely able to sequence instruction or encourage transfer of learning. Although no teacher may consciously plan his course this way, attrition can produce such a result.

At the same time that adolescents are involved in a revolution of rising expectations, the adult world is tending toward conservatism and accountability, a word which is beginning to have a punitive ring. Perhaps the direction, toward measurable outcomes, is appropriate, but the focus is not: New York State, for one, takes the end-of-the-pipe approach favored by the EPA in its early rulings. Public pressure and the national sweep (at last count, over two/thirds of the states have MCT's in the works) toward competency testing as a measure of students' and

schools' performance have given us a new factor to deal with. Laymen, whose ignorance of test instruments may be excused but not forgotten, make incorrect inferences drawn from faulty applications of inaccurate and imprecise test instruments. Misinterpretation is compounded by some unbelievable flights of logic in the media, especially in local newspapers. A recent editorial bemoaned poor test scores of teacher candidates in Dallas, Texas, and then made the quantum leap to the conclusion that our only hope for our children is to test every teacher in New York State, right away.

Accountability is not the only new word in educational parlance, for cost accounting is making itself known, as well. Its principles are well known in industry, where cost-per-unit is a guiding concept. Modern theorists in evaluation design are including cost evaluation as an important item in their models. For the taxpayer, cost (not necessarily evaluation) has always been an important item, and justifiably so. But here the taxpayer and the evaluator part company. It is very difficult for the evaluator to draw valid conclusions about cost and benefit, but it is easy for the taxpayer. The conclusion he's been drawing of late is that there is too little benefit for too much cost. School budget proposals are being defeated with increasing regularity by increasing margins, and the effects are being felt at all levels. Curricula cannot be implemented as they were designed because there is no money for

the necessary teachers, materials, or equipment. Old textbooks not designed or appropriate for the purpose are substituted for new books, films, and other software. Science students read about labs instead of performing them. The most expensive (cost-per-unit) programs are the first to go because their elimination shows a big "savings" in a hurry. Also, many expensive programs are regarded as frills by the public, and so eliminating a course such as Advanced Placement Biology has a certain face validity. The "back to basics" movement has been responsible for the cancellation of many fine programs.

Although social changes figure prominently in any discussion of change in attitude toward education, institutional change is also important. More rules, more laws, more mandates, and more regulations have led to the development of a bureaucracy of education, particularly at the state level. The plethora of rulings, some of them contradictory, tends to immobilize everyone involved. Like the classic bureaucracy of caricature, the educational institution shows a long spell of inertia and resistance to change, followed by a brief spurt of sudden and often drastic change in response to overwhelming pressure built up during the long spell. The final step is the retrospective falsification of history to show how the new policy had been planned all along. For many schools, and I suspect for most schools, standardized tests, curricula,

and the basic factory- or military-like structural model have not changed much since the first few decades of this century, yet competency testing has swept the country in the past five years as if it were the last, best hope for salvation.

I must cite a personal example of being manhandled by the system. Last month I participated in a State Education Department workshop, the ostensible purpose of which was to train teachers in holistic scoring procedures for the new minimum competency exam in writing, a test which will be imposed immediately as a graduation requirement. It soon became clear that the real purpose of the conference was to scrape up enough numbers to look like reliability data for the test. Almost every question about design, validity, reliability, or implementation was answered with, "We don't know why, either, but that's the way it's going to be." It seems that the Regents of the State of New York told the testing division of the Education Department to produce a test, post haste. The test constructed, members of the English Bureau (who ran this conference) were dispatched as flak-catchers to gather some numbers for the test while presenting it as fait accompli. How 40,000 vaguely-arrived-at numbers of questionable validity are going to assume the validity necessary to measure competency when they are bunched together is a miracle not covered in my statistics background -- we were asked to rate 200-250-word reports on twelve criteria in <u>two minutes per paper</u>! It frightens

me when people who decide what is good for others are more interested in having numbers than in knowing what they mean.

And this is not New York's first attempt. In an effort toward setting minimum standards, New York introduced Basic Competency Tests several years ago. The public's reaction to the battery of five tests was interesting: some were regarded as too simple; some, too difficult. The State's reaction was even more interesting: the Basic Competency Tests were killed, some quickly and some slowly, and the new Regents Competency Tests were ordered. Test scores, however, counted, just as the new test scores will count until the fate of these tests is decided, probably in reaction to public approbation or the lack of it.

In an important way, local control of education has been diminished. Mistakes and miscalculations, regardless of motive, have been visited on all of the State's schools, and local citizens may have come to view the school as just another arm of the State, part of the impersonal bureaucracy of the establishment. They see the institution of education not in a leadership role, but reacting defensively to pressure. Individual effort is blunted if not confounded, and the school becomes another unit of the state government which has served them not so well.

Adults who are at least minimally competent, who have basic computational skills, have a hard time understanding why it costs so much more to produce what some believe is so much less. They refer not only to basic school budgets

but also to the billions of dollars poured into education by state and federal grants. They assume, as do the funding agencies, apparently, that the availability (per se) of money is a solution, that the funds will spread themselves like a healing balm over the ills of education. The allocation of grant money has been both a cause and an effect of the problem.

The grant money, and there has been plenty of it, has been concentrated on remedial and innovative programs, not on developmental ones. The migrant tutorial program, Title I, and PSEN (NY Public Law 241) are all remedial programs competing for what is basically the same student population, perhaps the bottom tenth of the whole student population.

Via mini-grant, an occasional sum has been spent on a developmental program, but rarely enough for a first-class job to be done. There has even been money for grants to replicate projects funded for other schools. Since evaluation is generally an insignificant or nonexistent part of each project, careful thought need not be given to measuring or monitoring the outcomes of funded programs and treatments. As Stufflebeam has pointed out in many writings, devoting three lines of a 50-page grant form to evaluation does not exactly emphasize the importance of evaluation to the proposal writer (50).

Because of limited money per grant and limited time and professional assistance, grants have taken the path of least resistance and have ignored the majority of the

student population: to a large degree, they have been either remedial or innovative, in either case serving a small segment at one of the extremes of the population. It has often been remarked that education is measured at its extremes; perhaps it is funded at its extremes, as well.

As a writer of several grant proposals, I found some forces pushing me toward those extremes:

1. That is where the money was. The funding agencies, who must deal in goals but not in objectives, targeted those areas, and a grant that tended toward what I would call developmental work would not be likely to be funded. At one point I received a communication which informed that the grant proposal we wrote was fine but could not be funded unless we made it "a little more remedial," thus changing the purpose of the project.

2. Those were the easiest areas to work in. Anything new could be labelled innovative, and anything to help the poorest students could be called remedial. Most remedial programs dealt with few students, while many innovative ones dealt with a single course, and so the majority of the student population was ignored. Since there was rarely money available for staff development or technical assistance, there was little motivation for much of either. Materials, software, and equipment were accumulated; marked Title I, II, III, or IV; filed; and that was that. It is not that the materials were never used to good purpose; it is just that the systematic program for accomplishing an end

evaporated as soon as the money was encumbered and the materials and equipment came in.

3. Money would have to be spent in a hurry. "Get a grant for $4000-5000 together by next Thursday" does not make for needs assessment, it makes for likes assessment: what would we like that we can come up with by Thursday? When agencies decided, often at the last minute, that they had money to spend, we had to grab quickly before the coffers slammed shut for another year. If we didn't have time to determine what we really needed, we took what we could get and tried to use it somewhere.

4. Local districts, already trying to cut costs, rarely budgeted money for curriculum development, so there was rarely money or even time provided for the implementation of a program based on materials obtained through a grant. Getting large numbers of staff involved, on their own time, in planning or carrying out a program was not easy, so we started writing "Lone Ranger" grants, those which could be planned and carried out by one person or a very small group. I wanted to change my media and communications course, so I wrote an "innovative" grant to get some new software and equipment. One science room was remodeled for innovation. After innovation, the ceiling did not leak and the electrical receptacles worked. Remedial grants were written for reading and math instruction, instruction which took place in isolation, with little or no contact with regular instructional personnel or activities.

It is not my belief that the grants were useless expenditures of money, but rather that the great majority of them had little impact on student performance on either a widespread or long-term basis. Thus, they may have accomplished what local districts could well have done on their own and should have done on their own. The majority of the student population was minimally affected by the millions, if not billions, of dollars spent.

The above is not to say that nowhere in New York or in the rest of the U. S. were conditions any different; the point is that other, better programs, if they existed, did not have an impact on our local district, so they did not exist for us. The context which most immediately concerns me is the school in which I teach, but Stufflebeam and others who write about abuses of grant funds convince me that the local district serves as a microcosm for the state and for the country.

But the causes listed above do not provide a satisfactory answer to a part of the question: why is there so much evidence of students' inability to read and write capably, competently, clearly?

Substantial research evidence shows that that which is not taught is not learned as well as that which is taught. The apparent simplicity of this statement masks a very complex set of variables which have played their part in producing students, high school graduates, who do not read or write up to their potential. At this point I am

eliminating several aspects of the original question:

1. The relative achievement of students in 1979 compared to that of earlier students is to me a mildly diverting but rather unproductive topic for forensics. Whether today's students are better or worse, they and the society they live in are different from those of the past, and the goals of education will not be changed by resolving the debate. If today's students are worse, we should try to improve curriculum and instruction; if today's students are better, we should still try to improve curriculum and instruction.

2. What constitutes minimum competency in reading and writing is clearly not going to be decided by me or others like me in the field. I have spoken and corresponded with officials in the State Education Department ranging from test designers and psychometricians to bureau chiefs. Although the degree of politeness has varied, responses have indicated that teacher input does not shape policy. Nor does the input of local administrators, local school boards, state and national organizations of educators, or other concerned groups outside the power structure of the state. To be sure, opinions and recommendations from all of these groups have been solicited and examined before being studiously ignored or discarded as being uninformed or self-seeking.

I suspect that this aspect of the question is soon to

have an answer from the judiciary. The courts may solve the competency problem by declaring state and local tests to be invalid, discriminatory, or illegal. Charges of ambulance-chasing are already being made in professional journals: witness McClung's detailed (if emotional) response to the "distortions" and "misrepresentations" of his position by Getz and Glass (32). The issues will not be settled in a war waged in the journals, of course, but the literary battle has served to delineate some critical points. According to McClung, such testing is particularly vulnerable to litigation because of its reliance on a single assessment (purportedly a highly valid and reliable one) for a decision with consequences of great seriousness (32).

Eliminating comparisons and competency considerations brings me to the focus of this practicum and the final causes of the problem: the teaching of reading and writing.

Teacher preparation is partly to blame. Teacher education in instructional techniques has been inadequate, as few have been trained to teach students <u>how</u> to learn the content of a particular discipline. Instruction has centered on <u>what</u> to learn, or what to know, rather than on the structure of the content. In practice, teacher education, and so, secondary education have not had as their goal the creation of independent learners in the discipline. Science teachers who were taught science teach science; they do not teach reading and writing in the discipline of science.

It has been suggested that forty years is the average lapse between research discoveries that bear upon practices in teaching, and actual implementation of organized change based on the findings (57). Given the changes in students and society in the past several decades, it is not surprising to find that some instructional and evaluative techniques of the 1940's and 1950's are not appropriate for today's classrooms. Yet many practices continue. Traditional grammar, despite the weight of research evidence testifying to its inefficacy in improving writing, continues to be taught, complete with sentence diagramming, in many schools (52). In some it is taught (as writing instruction) in every grade from middle elementary to grade 12. I'm afraid the return to basics movement may cause the dust to be blown off even more old files which should have been given a decent burial, because the movement lends legitimacy to the good old ways of the good old days.

I do not mean to state that that the structure of the language is a discipline unworthy of study, for grammar has a logic deserving systematic and intensive study by those who would be experts in analysis of the language. Grammar is not, however, worthy of the reverence with which it is evidently viewed by some educators and much of the public. Teaching analysis does not imply that synthesis will be learned, and teaching grammar does not imply that students will learn writing.

In surveys conducted by my research classes in 1976 and 1977, English was regarded as both the most important and least popular subject by the majority of students and parents surveyed. The myths about and realities of instruction in grammar could be responsible to a large degree for both findings.

The reason given by respondents for the primacy of English class was that the important processes of reading and writing were learned therein -- respondents recognized the importance of the processes but believed that they were learned in one class. Many teachers share this belief, as will be noted below.

To return to teacher preparation for a moment, graduate courses in education are regarded with something less than universal esteem by teachers in the field. Life certification to teach in New York State can be achieved by acquiring either a master's degree or thirty hours of appropriate graduate study. A survey conducted by a former colleague revealed a widespread feeling that education courses are vague, unrealistic, and impractical. One respondent estimated that 5% of what she studied in a 33-hour master's program was directly useful in her classroom. These are not cited as statistics of great significance, but as indications of general discontent with education programs. Further study and professional growth are not encouraged by programs which are viewed with apathy or disdain by the clientele they are supposed to serve. It has often

been remarked to me that education courses, particularly methods courses, are the most poorly taught of all graduate courses. In my experience in five graduate schools, I've stood in many registration lines and watched teachers opt for advanced content courses, not advanced methods courses. Yet as far back as 1957 teachers were asking for help in the teaching of reading: 80% of the teachers who responded to a national survey indicated that the graduate course which would be most useful to them would be a course in teaching reading (7). Perhaps this contradiction can be explained by looking at a prevalent misconception about the teaching of reading. Just as students believed that they were to receive instruction in reading and writing solely in English class, so do many teachers believe that reading is a prerequisite for, and not an intrinsic part of, learning in their subject areas. They regard reading as an extra job and not their first responsibility, if their responsibility at all.

Attitude and practice are closely related in education, and when myths persist, associated practices also persist. It can be inferred from practice, then, that many teachers believe their subjects to be organized bodies of facts, nothing more. Mastery of the course involves knowledge of the right facts, preferably in the right order. Proof exists in the number of examination and discussion questions which require from the student nothing more than the simple recall of fact (9). Smith and others have concluded that students

structure their learning for the types of tests we give and the kinds of questions we ask (48). If there is no need for the student to draw conclusions, make careful judgments, or engage in independent thinking, it cannot be assumed that he will do any of these. A department entitled "It Bears Repeating" in The High School Journal, which reviews classic studies in education and psychology, cites landmark studies which lead to five conclusions of importance to educators at all levels:

1. No subject can claim to improve intelligence more than any other subject...Further, the mind is not a muscle and does not become "stronger" or more analytic by completing certain tasks, unrelated to the past or future.

2. The mind is not a "container." If we wish to have students who will retain new knowledge longer than the date of the test on it, we must tie that new information to prior experience, to previously learned generalizations, and to future applications.

3. If we desire transfer of training (which many educators would identify as the ultimate goal of all schooling), we must demonstrate, actively and often, how a new piece of information can be transferred to another situation.

4. Transfer of training is most likely to occur when students are encouraged to generalize. Further, they must be rewarded for applying the generalization rather than simply recalling it and reciting it verbatim.

5. ...Our tests are usually perceived by our students as the ultimate barrier which they must overcome. Teachers who tell their classes that they are teaching them to think and then later administer a test which only demands recall are unlikely to teach much thinking. Transfer of training is probably most likely to occur if we construct our tests in such a way that the test items require the student to apply what he has already learned to a new and novel situation (57).

Why don't all teachers do these things? We don't appear to be more intransigent than other groups, professional

or not. Perhaps, neither are we more ambitious, far-sighted, or free from what is known as professional jealousy than other groups.

The importance/training survey cited above yielded findings similar to those of a formal study at the Pennsylvania State University. Some pertinent findings from that study point to teacher training as the key to the problem:

1. Content area teachers in secondary schools have little training in the teaching or use of reading skills.

2. Teachers do recognize the importance of reading skills and would like to help their students learn them.

3. There is a vague assumption that English teachers should and do know more about the teaching of reading than do (and should) other teachers.

4. English teachers do have more training and experience in teaching reading, but the difference in training may be a marginal one.

5. Reading teachers need, but do not have, training to become effective resource people for content teachers.

6. Someone in the school must establish clear lines of responsibility for coordination of the total reading program (15).

Perhaps, then, if someone makes reading teachable for the content area teacher by providing him with the necessary training and materials, he will be able as well as willing to teach the skills necessary for learning in his discipline.

What must be overcome is a natural disinclination to "trespass" on the territory of others. The inter-disciplinary approach is much discussed but seldom realized, for it depends on the recognition of the following:

1. Content area teachers are in the best position to teach the language skills of their disciplines.

2. Communication experts, that is, English teachers, can be effective resource people for content area teachers.

3. Cooperation of these two groups can result in reinforcement and transfer of learning with respect to the communication skills common to learning in all disciplines.

An eventual goal, but one beyond the purview of this practicum, is to include all teachers in the teaching of communication skills, both global and particular. An achievable first step in this direction is to encourage those who have the most experience and training in teaching reading and other communication skills -- the English teachers -- to use materials from science and social studies classes in their lessons on reading and writing.

Discussions with the English teachers led to several conclusions:

1. They all have experience in teaching reading comprehension per se, but almost as if it were an isolated skill (it is so treated on state English exams) and not a skill necessary to learning in all content areas in the secondary school.

2. They were trained to teach the skills important

to the reading of works of literature (e.g., sensitivity to author's tone and attitude), but not to teach global skills or particular skills from other content areas (map-reading).

3. They rarely used print materials from other content areas in their lessons on communication skills.

4. They recognize their success with direct instruction within the content area of literature and feel confident that, with proper training, they can work with teachers in other content areas in extending instruction in developmental reading.

If the English teachers can be trained to act as resource people -- first by using materials from other content areas, then by working with teachers from other content areas -- we are on our way to a language acquisition program which recognizes that mastery of communication skills is the key to learning.

Operational Objectives and Means of Evaluation

At this point several conflicting thoughts come to mind. From my reading in evaluation design I recall a simple proportion: the more involved and extensive the proposed treatment, the less likely it is to conclude with a significant difference in performance. At the other extreme is the personal desire, after analyzing over 300 books, monographs, and journal articles cited in seven ERIC/EPSIS searches, to try to reform the world. A brief assessment of my position in the local district may serve to explain why I've chosen objectives with the former of the above in mind.

Canajoharie High School, located in a rural community in upstate New York, has an enrollment of about 550 students and a staff of about 30, including one building principal and 1½ guidance counselors. The English Department, which I chair, comprises four full-time and two part-time teachers. Also in the high school is a reading specialist employed on a year-to-year basis through Title I funds.

"Chair" is not juste to describe department leadership as it is defined in our contract: it is a sedentary position. As chairman I have the authority to do whatever everyone else in the department agrees to do, as long as it doesn't cost any money, require release time for teachers,

make any waves in the building or community, or otherwise disturb the status quo. Another chairman describes the role as walking softly and carrying no stick.

Yet there is tremendous academic freedom for individual teachers. Like any other teacher in my building, I have great latitude in selecting materials and organizing instruction. This apparent contradiction has an explanation: most individual activities do not require an administrative decision, and so there is great freedom; most group activities do require administrative participation, supervision, or decision-making, and so there is much less freedom.

Time is another important factor. Because I am on a sabbatical research project this semester, I have the time to design and produce materials and to work with other teachers on their free time. After June 22, that will not be so, and the treatment should be completed by then.

The relationships among what one knows cognitively, what one is able to do, what one is willing to do, and what one actually does are not always predictable. I will work under the assumption that attitude is followed by action, provided that the necessary knowledge (of what to do) and enabling activities (of how to do it) are made available along the way. Reinforcement, internal and/or external, must follow if the desired actions are to continue, and this is not a short-term process. I view this practicum as a crucial first step in necessary modification of curriculum and instruction. It is essential that the

participants in the treatment view its objectives as finite and achievable, and the size of the content units of this practicum workshop has deliberately been limited to what I view as achievable in a treatment time of 10 - 14 hours over four weeks.

The goal, on the other hand, is long-range and is not expected to be accomplished in full merely by meeting the objectives of this practicum. The eventual goal is to improve student performance in reading and the other communication skills by:

1. Translating research findings about reading and writing into practicable activities for classroom teachers who have had little or no formal training in teaching these skills.

2. Coordinating instruction to encourage transfer of learning by clarifying the underlying language base common to learning in almost all disciplines.

3. Establishing the English teacher as the resource person in communications who can and will work with other content area teachers in helping students learn how to learn by developing the necessary communication skills.

Below are the objectives designed to lead to the accomplishment of the first step toward these goals. The degree of change expected after the treatment is difficult to quantify. For the purposes of these objectives, I would suggest that a change of 10% - 20% would be significant.

Operational objectives:

1. 75% of the English teachers who complete the workshop will express significantly greater confidence in their ability to teach reading skills through materials from science and social studies classes, as well as the willingness to do so, as measured by the pre-test/post-test package (Appendix B).

2. 75% of the English teachers who complete the workshop will demonstrate a significant increase in the ability to do at least four of the following:

A. Outline an overview of the Sack-Yourman model.

B. List factors which determine reading difficulty.

C. Construct a reading lesson based on a 10th-grade science or social studies textbook.

D. Give differentiated assignments within the same text.

E. Explain the theory of reading comprehension upon which the New York State Regents Competency Test is based.

F. List the five major skills of reading comprehension.

The increase will be measured by the pre-test/post-test package and the model reading lesson.

Terminal objective:

By increasing his knowledge about the process of reading and its skills, and his range of instructional techniques and strategies, the participant will become equipped to be a more effective teacher of reading within his own class, and an effective resource person for teachers in other content areas.

Solution

Alternative Strategies

The most popular solution is the one already being advanced in most states -- minimum competency testing. Tests exist at all levels: in New York they are developed and administered by the state; in Florida, by the county; in Nebraska, by the local district (17). Five years ago the tests were about as common as whooping cranes, but now, hardly a professional publication goes to press without at least one article about the testing. Some prestigious journals have recently devoted entire issues to the topic: Phi Delta Kapran, May '78, and Journal of Reading, October '78. I predict that ten years from now the topic will find itself on the list of impromptu essay topics on composition exams.

This solution is unacceptable on both theoretical and practical grounds. Several writers have raised questions which are either unanswered or unanswerable (4,5,51). Until there is some consensus on what is competency, it is of little use to debate the merits of a given testing program.

On the practical level, I stated earlier that influencing the state testing program is not achievable by the individual educator or district. At this point, state officials responsible for the tests have too much rhetoric and too much prestige invested in the exams (as they are)

to be open, let alone responsive, to new information.

The last reason for the unacceptability of the testing program as a solution is that it focuses on the symptoms, not the causes. The new testing is tantamount to attempting to cure cancer by declaring it to be illegal, thereby banishing it from the community.

Competency testing is simply not going to be the solution to the problem. It may set in motion a series of events which eventually leads to a solution, but educators cannot afford to wait for that outcome, if and when it occurs.

A variety of treatments applied directly with students is described in the literature of professional journals, many of the treatments the subjects of research studies. Replicating a successful study would be personally satisfying but beneficial only to students in the treatment group. Given the restrictions under which I work, that would be a small group. Rather than to demonstrate that I can teach students to read, I would prefer to demonstrate to other teachers that <u>they</u> can teach reading, thus effecting change that is both comprehensive and long-lasting.

A natural thought would be to send all teachers back to school for retraining in the teaching of communication skills basic to the content areas. This extreme is both impractical and unnecessary. The basic reading course offered universally is entitled something like "Diagnosis and

Remediation of Reading Problems," an indispensable course for reading specialists but one unnecessary to the secondary content teacher who can use the resources of the reading specialist (40). Where there is no access to reading specialists, there is no shortage of diagnostic instruments and techniques employable by the classroom teacher with a minimum of special training. Choosing from among such instruments and techniques can be made the responsibility of the educator who is most familiar with the local curriculum and most qualified to make the choice.

Furthermore, restrictions of time and class size make treament of, say, the phonically disabled child impossible in the regular classroom.

Just as quality medical care does not depend on sending everyone to four years of medical school, quality reading instruction does not require that every teacher be a reading specialist or an expert in remediation. Through overuse, misuse, and abuse, the word "remedial" has developed connotations which lie somewhere between the pejorative and the obscene, and the semantic evolution has led to even more negative response by students (and many adults) to anything so labelled. But avoiding unpleasant connotations is not the only reason for rejecting this possible solution: what is needed is a developmental, not a remedial, approach.

This same reason is the basis for rejecting another possible solution, adding five reading teachers to the staff

and assigning students to a daily period of reading instruction. Aside from the obvious financial deterrent, such an approach would encourage teaching reading in isolation. Reading instruction is at present inadequate, in part at least, because it fails to integrate the skills of reading with the structure of the content of various areas of learning (39). More instruction is not the answer; different instruction is. The strident proponents of the "back to basics" movement seem not to know that there is no reading, there is no writing without content (6). The structure of that content and the communication skills necessary for its apprehension are inextricably related; it is time to explore the mysteries of those relationships.

An interesting solution strategy would be to do not a thing. In immediate terms, doing nothing has great cost advantages over most other alternatives. Nothing might even be the right thing to do:

If aboveground nuclear testing caused the problem, we're not doing that anymore so students will do better. No more Nukes.

If the glut of children from the baby boom caused it, the Zero Population Growth people have the situation under control. Plan a desk auction.

If the SAT bears little relation to the curriculum, that's their problem. Get a new test.

If textbooks are too difficult, the free enterprise system insures that the easier ones will eventually sell

better and soon be the only ones in use. Invest wisely.

If this is just a phase that the school/student/family/society is going through, it will end of its own accord. Have patience.

If minimum competency testing does not work, public outcry will cause its brutal demise. Keep clear.

If it is only a perceived decline, perceived because of inappropriate measurement, perception will change when we eventually figure out how to prove that the decline didn't take place. Science conquers all.

There is a flaw in the logic of this course of action (creative inaction, really, called "benign neglect" in other circles): if things educational haven't gotten any worse, it does not follow that they couldn't be better. The direction we seek is the future, not the past.

Given the constraints imposed by limits of money, time, authority, and logic, an inservice workshop appears to be the most practical road to a solution. If such an approach is indicated, should an expert from outside the district be called in to design and conduct the treatment?

Since changing the behavior of teachers is the ultimate goal of an inservice program, planning the program should begin with assessing the conditions under which the desired changes(s) will be most likely to occur. For several reasons, bringing in an expert is not likely to lead to a favorable result (15).

As an outsider, the expert has no common ground, no

backlog of experience from which to approach the people taking part in the workshop. It has been my experience that teachers are a tough audience, indeed, when someone purports to tell them their business. Modern evaluation models stress the critical importance of the relationships among evaluators and on-site personnel. One-shot programs are almost certainly doomed to failure, at least as far as effecting long-term change is concerned.

Long programs conducted by outside consultants are expensive and time-consuming. The promised rewards of the treatment may be postponed for so long as to destroy participants' motivation. Time is spent either determining or developing relationships with teachers and administrators. Since people who work together already have such relationships, albeit not ideal ones, it would seem to be more efficient to use or modify existing channels than to create new ones.

Strategy to be Implemented

The treatment I propose is an inservice workshop for English teachers, conducted by me. Such a treatment has many advantages:

In dollars it costs the district practically nothing. My services come at no additional cost, and the participants (all voluntary) will not be paid. Re-assignment of other staff to proctor exams during the full-day session will not include hiring extra personnel. Total extra expense to the

district should be less than ten dollars, this to cover paper and duplication costs. If any benefit at all is realized from the treatment, the solution will have to be considered cost-effective.

In time it costs little to the district or to the participants. The full-day session is scheduled on a test day, so there is no loss of instructional services. Participants in the workshop will be relieved of proctoring duties for that day. The rest of the treatment time, approximately half of it, will come from participants' unscheduled time during and after the school day. The cost in time to each participant is about twelve hours, six of them spent in the full-day session. I hope that the participant will view the time investment as not so much to be prohibitive, yet enough to make the whole project seem worthwhile and potentially successful. Most of us are not believers in miracle cures for educational problems.

The necessary working relationships already exist. Since I have been department chairman for two years, participants have reason for and experience with accepting instructional leadership from me. They have been kept informed of my sabbatical research, and, indeed, expect me to return with some practical suggestions and recommendations. There is research evidence to show that previous organizational involvement can be a benefit if a program is planned to use it, or an impediment if it is ignored (2).

My solution strategy will benefit the greatest number

of students. Beginning with the first day of the next school year, 550 students can benefit from the proposed outcomes of the treatment. My purpose is to prepare teachers to use techniques proven to be effective by research. No new books must be awaited, no new and expensive curriculum package must be approved for purchase, no classrooms must be remodeled. A serious effort has been made to avoid the "Fine, but..." response which is so often forthcoming when a new and promising program is advanced.

Another advantage of my strategy is that it is a seed program, not an end in itself; it is a necessary first step in revision of instruction. Kozuch and others have indicated that previous unsuccessful attempts at innovation may have severely detrimental effects on implementation of a new program, thus the importance of this first attempt being accomplishable and measurably successful: it is going to set a precedent for future attempts at revision (29). The objectives are limited, but failure to meet these would insure failure to achieve objectives of greater scope or length of range. If this step toward revision is seen as a successful one, not only will I have more customers for further reading workshops, but I will also have the beginnings of an interdisciplinary approach to education, something about which there has been a great amount of discussion but very little action. Increased contact between English teachers and other content-area teachers can encourage eventual transfer of learning for teachers as well

for students.

The reading specialist can become more effective by involvement with regular instructional personnel. In the past, the specialist was someone to whom students were sent to get their reading fixed. In the future, the specialist should work with teachers as well as with students, and reading should be regarded not as a course per se, but as an integral part of all courses (15).

All the good will in the world is not enough to accomplish change without the cooperation of key personnel, in this case the building principal (21). The treatment outlined below was designed to be within the limits of individual and departmental prerogatives. Content and procedures have been approved by the building principal, who has been supportive of my efforts since this project began to take shape some months ago.

The focus of the workshop is reading, because reading is not just topical; it is crucial to learning. The ability to read is recognized as the single most important determinant of academic achievement (27). Teachers know this, parents know this, students know this (19). Improving student performance in reading, even to a small degree, has benefits which will accrue to the entire school. There is reason to believe that improvement in reading ability leads to improvement in writing ability, and that mastery of communication skills leads to mastery of the content of a discipline (18,49,56). Almost every course in our school has

a textbook as the principal source of its content, and reading and writing assignments and tests as the principal measures of student mastery of that content. There is no better place to start, for if students develop good communication skills, they will perform well on any valid measure of reading and writing ability, including competency tests.

Research suggests that what is needed is not so much a revision of curriculum as a revision of instruction. Although this division is somewhat artificial, it is useful to point out the distinction between the materials and what is done with them.

In sum, the solution strategy is based on several assumptions:

1. To be effective, a change in curriculum must also be a change in instruction.

2. The fact that people have information does not guarantee that they will use it, but not having it will guarantee that they won't.

3. It takes planning time to modify one's instructional techniques; only when new techniques are demonstrably superior and easily useable are they likely to be implemented.

4. Successful change begins with a small but successful first step.

Implementation Plan

Any treatment is based on assumptions. What follows is a series of assumptions drawn from recent and classic research on language processes. These have guided me in planning goals, objectives and procedures.

1. Back to basics should not mean more of the 3 R's; it should mean a close look at the language processes common to most learning (41).

2. Reading instruction should not be isolated from instruction in content or in other language skills (36).

3. By relating the form and purpose of communication to its content, all language communication skills are teachable through content (35).

4. Vocabulary instruction can and should be integrated into content area instruction (12).

5. Instruction in reading can result in improvement in writing skills (53).

6. Reading is an effective stimulus to writing, especially when there is discussion before and after reading (31).

7. For improving writing, direct instruction in sentence structure is more effective than is the error-avoidance approach (52).

8. Reading is an active or transactive process, not a passive one (10).

9. The "conversation" between the reader and the printed word, that internal dialogue, is necessary to achieving the

higher levels of comprehension, such as critical thinking (9,10).

10. Particular ways of approaching or responding to reading can be learned through direct instruction (41).

11. Reading processes such as letter and word discrimination can be learned in parallel fashion; mastery of one is not required before learning of the next can begin (14).

12. Rates and methods of acquisition are not uniform, but the sequence in which we acquire language skills is definite, from simple to complex, from lower order of comprehension to higher (9, 16).

13. Immature and mature readers use different clues to meaning. The beginning letter and word length are dominant variables in word recognition, and automatic preprocessing increases speed and comprehension. Instruction in conscious processing can lead to its integration as preprocessing and to increased speed and comprehension (14).

14. Faster readers pick up more information per fixation and process it more rapidly, especially the higher-level information, which in turn allows them to use context clues more effectively (26).

15. long lists of behavioral objectives look nice but mean little; the whole values of comprehension are more important (16).

16. The subskills of comprehension are few: word attack and acquisition, sensitivity to passage structure, finding answers to detail or paraphrase questions, analysis of tone

and purpose, and drawing of conclusions or inferences (8).

17. Readability formulas should not be substituted for common-sense judgments by teachers (16).

18. Some types of questions are more effective than others in encouraging thinking at higher levels (13).

19. "Good" teachers use reinforcement and ask higher order questions to elicit thoughtful answers (1).

20. Other techniques are equally effective as direct questioning in encouraging higher-level thinking (13).

21. Studies have indicated that "home" factors are five times as important as "school" factors in determining the variance between students' levels of performance -- but, taken together, these two groups of factors account for only one/third of the total variance! A list of what we don't know about the acquisition of language processes would be a long list, indeed (41).

Schedule

The treatment is designed to be completed in three to four weeks, with a total treatment time of approximately twelve hours. Because some group and all individual meetings will be scheduled at the convenience of the participants, meeting dates are not given. What follows, then, is an overview of events rather than a strict timetable. Given the constraints of a secondary school setting, maintaining an order of events is a more realistic goal than adhering to a strict timetable.

Action Taken

Well before the date of the first session I approached the English teachers and asked for their participation in the workshop. Of the seven staff members asked (six English teachers and one reading teacher), all indicated a willingness to participate, although most questioned whether they would have the necessary time during the last hectic of the school year. Upon my agreement to help with their teaching duties during those weeks, all agreed to take part.

At the first meeting the overview (Appendix C) of the workshop was presented and then the pre-test package (Appendix B) was administered: participants completed the materials survey, the situations survey, and the pre-test.

At the second meeting the answers to the pre-test were discussed. It was found that although each teacher had some information in response to almost all questions, few teachers had complete information for more than one or two questions. Here an important point was raised by one participant. She said that she was familiar with most of the information on the pre-test, but could not produce it "off the top of her head." Others noted that the top of the head is the source for many day-to-day plans and even more discussion strategies, so developing facility and familiarity with workshop techniques might be a good way to insure that they

will be used in the classroom.

Following review of the pre-test, the materials were distributed and discussed briefly. When the objective (Appendix C) was discussed, the reading teacher, with whom I had worked before in content-area reading, recognized the similarity between the workshop plan and the Pittman Plan for accomplishing objectives. I explained that the process of the workshop was its key -- it was impossible to simply hand out new materials and equip everyone to teach content-area reading.

This meeting was concluded with two points:

1. There were few step-by-step directions, and they could meet the objectives in whatever way they thought best.

2. This was not meant to be a textbook exercise: they should produce lessons which could be used in class next year.

The third and fourth meetings, the individual meetings, were surprisingly brief. Where I had anticipated many questions, there were few. Participants tended to ask for confirmation of their plans rather than for further information. Some suggested expansion or refinement of the workshop objective, to which I replied that the objective could be considered a minimum, and not the end-all of instruction.

It was during these meetings, however, that the exigencies of time claimed one of the workshop participants. One teacher informed me that there was no way that he could prepare his exams on time and still complete the workshop. He would attend the final session, but would not have a lesson to present.

A scheduling snafu further jeopardized completion of the program. Five of the participants were mistakenly assigned to proctoring duties during the afternoon of the scheduled full-day session. Since this was not discovered until the day before, little could be done except to postpone the afternoon workshop activities to a date later in the week. That taken care of, we began the final session, hoping to complete procedures 1.-3. during the morning.

As teachers prepared to present their work before their colleagues, there was some tension. In our solitary profession we are rarely observed by colleagues or even by administrators, and when we are observed, we do not choose that time to try something new. I opened the session with the thought that the brains we needed to solve the problems of instruction in English were grouped around the table; what we needed was a reason to use them and a willingness to share the products of their work, and I hoped the workshop had provided a little extra of each.

We established some ground rules. Each participant would take as much time as he required to make his presentation, and listeners could interrupt at any time for questions or clarifications. The average presentation lasted about fifteen minutes, with another ten to fifteen minutes of discussion by other participants as the strengths of each plan and other refinements or applications were noted. Without being a mutual admiration society, the group functioned in a warm and supportive atmosphere. Perhaps my

perception was colored by what I had hoped to see, but I saw a group of people eagerly discussing what they did well. As a veteran of many psychology courses, I have remarked that individuals in groups are only too willing to discuss their problems, their shortcomings, their failures. They will disburden themselves of awesome personal secrets to total strangers--sometimes the stranger the better. Yet asking members of a group to share their strengths is likely to be met with suspicion, if not outright hostility.

When the last lesson was presented, one teacher said the suspense was killing her--she had seen me taking notes during the presentations and wanted to know how well they did. Turning the question back to them, I asked each to comment on a presentation which was unusually imaginative or thorough in meeting part of the workshop objective. Parts 1, 3, 5, 6, and 8 of the objective were singled out for discussion. Part 2 was omitted, probably because the formula was uniformly applied by all participants. Objective part 7 was also ignored during this discussion, although perhaps for a different reason. I felt that the teachers were so immersed in the techniques for teaching vocabulary and reading that they gave less information about evaluation than they could have. Most mentioned pre- and post-tests but did not make specific comments about their construction. Part 4 was also ignored, perhaps because it duplicated information given in part 1.

At this point they remembered that I had not answered

the question, and they asked again to hear my notes. The notes were not so much an evaluation as a record of approaches and techniques that I thought would be useful in my own teaching. They were read as a review of the morning's work.

Procedures 2. and 3. had been combined with the lesson presentations, so we moved directly to completion of the post-test package (materials survey, situations survey, and post-test). Since it was time to leave for proctoring assignments, we decided to defer the demonstration of cloze techniques until the first day of the next school year, as the cloze procedure was related to workshop activities but not necessary to the meeting of its objectives. There turned out to be no time during the remainder of the week when all participants could meet, and it was thought better to adjourn while people were enthusiastic than to try to schedule more individual or small-group meetings during the time when grade averages and report cards were due.

The meeting closed with a list of topics for workshops next year:

1. cloze procedures for diagnosis and developmental reading

2. context clue analysis

3. construction of a school-wide reading test with local norms.

Evaluation

Data and Analysis

Objective one:

Objective one is attitudinal: 75% of the English teachers who complete the workshop will express significantly greater confidence in their ability to teach reading skills through materials from science and social studies classes, as well as the willingness to do so, as measured by the pre-test/post-test package.

The materials survey and the situations survey are the primary means of evaluating the meeting of this objective. The tables below show the data on pre- and post-test measures.

Materials Survey
Pre-test

S	1-2	3-5	6-9	10+	Total
A	2	-	-	-	2
B	2	3	1	-	17
C	3	5	-	-	18
D	-	-	2	1	22
E	-	4	4	-	36
F	-	3	1	4	53
G	2	1	-	-	5
					153

Mean: 22 per S

Materials Survey
Post-test

S	1-2	3-5	6-9	10+	Total
A	3	2	2	-	21
B	-	5	1	-	21
C	-	5	4	7	109
D	1	4	3	-	31
E	-	-	-	6	60
F	1	-	1	12	127
G	Did not complete				
					369

Mean: 62 per S

On the materials survey, the number of uses per subject increased from 22 on the pre-test to over 60 on the post-test. More than one grain of salt must be taken with this statistic, however. The post-test survey was reworded to ask for the number of intended uses next year, and this year's intentions may not be the same as next year's practices. It is impossible to determine with any certainty an exact percentage of increase, but is seems that the increase is definitely a significant one.

The situations survey also shows a significant increase on all three scales: 4.0 to 4.9 on the practicality scale, 3.9 to 4.7 on the desirability scale, and 3.0 to 4.0 on the skill scale (table below).

As measured by the two surveys, then, objective one was met successfully.

Situations Survey
Pre-test

Situation 1.	5	4	3	2	1
practicality	3	3	1	-	-
desirability	3	1	3	-	-
skill	2	1	4	-	-
Situation 2.	**5**	**4**	**3**	**2**	**1**
practicality	2	4	-	1	-
desirability	2	3	1	1	-
skill	-	1	2	2	2
Situation 3.	**5**	**4**	**3**	**2**	**1**
practicality	2	3	2	-	-
desirability	2	2	3	-	-
skill	-	1	4	2	-

Means: practicality 4.0
desirability 3.9
skill 3.0

Situations Survey
Post-test

Situation 1.	5	4	3	2	1
practicality	6	-	-	-	-
desirability	5	-	-	-	-
skill	2	3	1	-	-
Situation 2.	**5**	**4**	**3**	**2**	**1**
practicality	6	-	-	-	-
desirability	5	-	-	-	-
skill	2	-	3	1	-
Situation 3.	**5**	**4**	**3**	**2**	**1**
practicality	5	1	-	-	-
desirability	3	3	-	-	-
skill	2	3	1	-	-

Means: practicality 4.9
desirability 4.7
skill 4.0

Objective two:

75% of the English teachers who complete the workshop will demonstrate a significant increase in the ability to do at least four of the following:

A. Outline an overview of the Sack-Yourman model.

B. List factors which determine reading difficulty.

C. Construct a reading lesson based on a 10th-grade science or social studies text.

D. Give differentiated assignments within the same text.

E. Explain the theory of reading comprehension upon which the New York State Regents Competency Test in Reading is based.

F. List the five major skills of reading comprehension.

The increase will be measured by the pre-test/post-test and the model reading lesson.

Before discussing the objective as a whole, it may be helpful to look at each of its parts.

Part A. of the objective was measured by responses to question two on the test. 5 Ss improved scores on this question, with an increase in mean score from 2.2 on the pre-test to 6.3 on the post-test.

Part B. was measured by question three from the test. Mean score increased from 12.5 to 17.0, and 4 Ss increased scores on this question; the two who did not show an increase maintained the "full-credit" score they had achieved on the pre-test.

Part C. of the objective was measured by less quantifiable terms. The model lesson was the chief criterion for

this objective, although question six was also a measure. Mean score on question six increased from 7.5 to 10.0, with 2 Ss improving on scores. The others maintained "full-credit" scores from the pre-test.

Since there was no model lesson included in the pre-test package, the degree of improvement or increase in ability must be inferred. Much of the information needed to produce the model lesson was not found on the test, as including it all would have expanded the test to unmanageable proportions. Further, this part of the objective is performance-oriented: it requires not just the reporting of information, but the demonstration of the ability to use the information to produce an acceptable lesson.

All who completed the workshop produced acceptable lessons with texts from science or social studies courses, although Ss chose different foci for their lessons. Two lessons stressed vocabulary development (one through context clues, one through morpheme analysis); one, patterns of communication; one, levels of questioning; one, diagnostic use of book parts; one, sentence and paragraph structure. As lessons were presented, listeners (including me) were surprised to hear such a range of good approaches applied to selections from the same two books. One S noted that she had learned how to do a great deal more with a great deal less in the way of print materials.

The experimenter would always like to infer that pre-treatment performance would have been inferior, but such an

inference may be justifiable in this case: if for no other reason than the lack of necessary information, Ss could not, in my estimation, have produced lessons of comparable quality prior to the treatment. In discussions during and after the presentations, Ss remarked that this was new territory, that teaching content-area reading was a new competency.

Part D. of the objective was met by 3 Ss; the others did not differentiate assignments. There was no indication in Ss' workshop objective that differentiated assignments should be given, and the context clue, communication patterns, and book parts lessons were designed without such provision.

The problem here is with the objective, not the model lessons. Objective two is worded so as to indicate that differentiated assignments should be given, when such is not the case in every lesson. One model lesson, the diagnostic use of book parts lesson, was designed to reveal individual differences, not to accommodate them. The lesson fails to meet part D. of the objective, yet the lesson is perfectly acceptable by other standards. Either of two expedients would eliminate the disparity between the practicum objective and Ss' lesson objective:

1. The workshop (practicum) objective can be rewritten to show that differentiated assignments are often desirable but not always necessary.

2. The Ss' lesson objective can be rewritten to show that, for the purposes of the workshop, differentiated

assignments are required.

Part E. of the objective was directly measurable by question one of the test. 4 Ss increased scores on this question, with one staying the same and one decreasing. The mean rose from 5.0 on the pre-test to 13.3 on the post-test. It appears that this part of the objective was met in satisfactory fashion.

The final part of objective two was the least successfull met, and again the fault appears to lie within the design of the objective and the test instrument: nowhere are Ss asked to list these five major skills. They could have been listed in response to question seven on the test, but they were not. In addition, I had hoped to use the model lessons to measure part F., but I encountered the same problem as with part D.: Ss' lesson objective did not specify the use of all five skills. With good reason, this part of the objective was met by no Ss.

Looking at the test as a whole, mean score increased from 45 on the pre-test to 72 on the post-test. I would like to stress that there is no "passing" score on the test--it is only a relative measure of knowledge in an area outside the competency of most secondary teachers. The average increase was about 27 points, better than a 50% increase over pre-test scores, which is a significant increase.

Looking at the second objective as a whole will be facilitated by the table below, which shows the increase for each S on each objective part.

Subject

Objective Part	A	B	C	D	E	F
A.	+	+	+	+	o	+
B.	o	+	+	+	o	+
C.	+	+	+	+	+	+
D.	+	o	+	+	o	o
E.	+	+	o	o	+	+
F.	o	o	o	o	o	o

The table shows that, as far as statistics are concerned, the second objective was met: 83% of the teachers who completed the workshop showed an increase for four or more objective parts, as measured by the test and the model lesson.

What this means in reality is less clear. Errors in design, errors in measurement, errors in observation, errors in interpretation and evaluation, statistical variances: any and all of these can be responsible for reaching conclusions of questionable validity. Here I'm going to take my own advice from the workshop -- don't substitute formulas for common-sense judgments by experienced teachers. Above are the formulas; below are my common-sense judgments.

1. Six out of seven participants completed the workshop tasks, almost completely on their own time, during the busiest time of the school year. The one who did not complete the tasks still came to the final session to hear the

other model lessons presented.

2. All six changed or refined the model lesson plan in some way, indicating to me a thoughtful and serious approach, not merely going through the motions to keep the department chairman happy.

3. I had allotted 60-90 minutes of the final session for lesson presentations. They quickly dispensed with my schedule and decided to discuss the presentations as long as they wished: this turned out to be for 3½ hours. When people want to talk this long about the products of their work, they must be interested in what they are doing, and they must consider it to be important.

4. There was a good bit of good-natured grousing about the time and work required to complete the workshop tasks. A conclusion, admittedly simplistic, that I drew long ago from my teaching experience is that working and thinking in a new area are accompanied by such banter only when the work is challenging and interesting.

5. Positive comments by participants were reported to me by other teachers and administrators -- these were not participants, and I had not solicited such reports.

6. Because of inequities in proctoring assignments which were going to result because of the workshop, I had not mentioned it to more than a few non-participants. During the last two weeks of school, many teachers in the building asked me about the workshop. What is it about, how is it going, what are you going to do with it next year, what

about my textbook: the questions reveal varying amounts of information held by the questioners, but everybody seemed to know something about the workshop. Somebody talked.

7. The conclusion of a "great" class is perhaps the most satisfying moment in teaching. It is also a satisfying moment in learning. The final session was such a class for me, both as a teacher and a learner. This is a most subjective judgment, but then so are most judgments in education.

Terminal objective:

By increasing his knowledge about the process of reading and its skills, and his range of instructional techniques and strategies, the participant will become equipped to be a more effective teacher of reading within his own class, and an effective resource person for teachers in other content areas.

Stated several times in this paper is the thought that the first inservice experience should be designed to accomplish a limited and achievable end as the first step toward a terminal objective or goal. By both objective and subjective measures, the operational objectives of this inservice treatment were met as a successful first step in creating the attitudinal and behavioral changes necessary to the eventual achievement of the terminal objective.

Incidental Observations and Recommendations

Inservice work is an effective vehicle for accomplishing short-term change in teacher attitude and behavior, but will the new attitudes and behaviors continue over time? Partial answers to this key question can be drawn from several disciplines.

Elementary psychology reveals that if new, voluntary behaviors are to continue, they must be reinforced. Rewards must not be delayed too long, or the behaviors will no longer be generated by the subject. Every incidence of the desired behavior need not be rewarded, however; intermittent reinforcement is an effective schedule.

From psychology of learning it is clear that teacher approval is an effective reinforcer for students, and that when reward becomes internalized, learning can become self-motivated. Also, when students "learn" information for the sole purpose of passing a test, they quickly forget most of what they "learned."

In the terms of economics, if the cost of a new behavior exceeds its value to the subject, the new behavior tends not to be repeated. Only when the value is greater than the cost will the behavior be repeated. Some costs and values are hidden, both to the experimenter and the subject, especially in the initial stages of an experiment.

Curriculum evaluation says that practically nothing can be assumed: the literature is filled with horror stories

about "identical" treatments which were shown by mid-treatment monitoring to have more variances among themselves than with the comparison group. I recall from somewhere an experimental math program which was discovered to be about 140 divergent programs conducted in 140 different classrooms. But at least this program was monitored; what about the countless unmonitored studies whose payoff evaluations revealed the bane of experimentation: no significant difference?

There must be provision for change during the treatment, and so monitoring and flexibility are design considerations.

From semantics the concept of elementalism states that change does not take place in a vacuum: a change in "teaching" behavior occurs within the framework of the individual's total system of behavior, which is a sub-system of a small group's system of behavior. The operation of small groups must be considered with respect to the larger groups of which they are sub-systems, and so on.

Doubtless there are other answers from these and other disciplines, but perhaps these partial answers and my own experiences can be synthesized into some general guidelines for accomplishing inservice change.

1. Accomplishment of goals must be related to but not limited to the meeting of operational objectives. It is a truism in education that if we can't measure what we should, we measure whatever is handy. It is nice to set a

standard, but it is nicer to know what it means. Much of evaluation is subjective, even what we try to quantify, and a walk through the forest is not the same as counting the rings on a tree. This is not an either-or proposition; both goals and objectives are important, and both must be kept in sight.

2. Inertia and resistance to change can be overcome if the rewards of change are immediate, and the more limited the change, the more likely it is to be brought about. Since the desired outcomes must be known in advance, a limited program is easier to manage, monitor, and measure. Reward is not delayed, and successful completion of a limited program can provide motivation for further programs.

A subject can make a small change in behavior at a small cost. If the value proves high enough, further changes are likely. But consider the subject's economic view of a large change (throw out that curriculum, substitute this one). It is highly speculative -- he has to make an immediate expenditure of great cost in anticipation of some far-off reward, the real value of which he cannot be certain. In the stock market and in the marketplace of ideas, most of us are not willing to speculate to that extent in futures.

3. The most important cost factor may be the psychological one. In effect, the designer of a program is telling his subjects, "I know, better than you, what's good

for you, what you should do, how you should behave." An unwritten assumption of this practicum treatment could have been that I knew what should be taught in other teachers' classrooms and how it should be taught.

What would it cost another teacher to accept this? Too much, even if the assumption were valid. Our preparation as teachers tells us we're all experts, and the lack vertical structure in our profession may confirm the illusion of equality (after all, to move up in teaching you must move out of teaching). We are all given the same answer keys, we are responsible for managing the behavior of others, we are the final authorities in our classrooms -- somehow we become convinced that our reputations depend on our having the answers to everything in the classroom. After ten or twenty years of this, do we want to hear that someone else is going to make us do it a better way?

In a limited program, such an "I'm right; you're wrong" approach can be replaced by "Let's see if we can develop a better way." For a short-term treatment, subjects should be more willing to make an investment. The time cost will be small, and the psychological cost can be converted into value: few people are opposed to improvement, especially when they contribute to that improvement.

To return to an earlier point, the importance of flexibility may now be somewhat clearer. If subjects are going to be involved (as opposed to <u>feeling</u> involved) in whatever change takes place, they are going to modify the

designer's concept of the program. Meeting the objectives of a lockstep program is going to be unlikely. Even with a captive audience for subjects, long-range change is also unlikely.

4. Subjects' behavior must be monitored by mid-treatment evaluation if the designer is to be aware of and able to head off unwanted outcomes. Since we are often blind to ambiguity in our own questions or instructions, misinterpretation is always a possibility. Informal observation may be sufficient to confirm that procedures are being followed and that the program is being conducted as designed. The flexibility mentioned above can best be made use of when there is early identification of divergent trends, and such evaluation may also reveal treatment design flaws while there is time to make revisions and save the program.

5. The process of an inservice treatment may be more important than the product. An approach which asks subjects to make presentations rather than to listen to the designer's will encourage their best thinking and efforts, for the audience pressure is focused on each of them in turn. If the reader views the purpose of inservice work as getting the best from the participants, I would suggest that participants be given an objective they can agree upon and be allowed to do the "work" of the workshop. In addition to producing the workshop product, several ancillary benefits could result:

A. Communication channels among staff may be opened or improved.

B. A successful group experience will set a positive precedent for further programs.

C. Participants may gain new competencies instead of just hearing about them.

D. Benefits are seen to be the product of the group, not only of its director.

E. Besides gaining approval for their best efforts, participants may be further stimulated by the best efforts of others.

F. The group is almost certain to develop useful products or processes not thought of by the designer.

6. It seems a good idea to explain to participants the "given" in the problem: the designer should make clear the assumptions, goals, objectives, and means of evaluation he is using. Unless the program requires that any of these be hidden from participants (as in a blind control), there should be no mysteries about the purposes and processes of the treatment.

7. Any problems or tasks addressed by the group should be real ones, so that the solution products and processes can be directly applied by the participants in their day-to-day work. Hypothetical solutions may not be transferred to real-life situations.

Conclusions

If it is desired that professional growth be a group as well as an individual process, inservice programs may be effective means of encouraging staff development. Recognizing that the local district is the place where the goals set by

all levels -- local, state, and federal -- must actually be met, New York State United Teachers recently adopted this position:

> New York State United Teachers recommends that on-site research in which dissemination and implementation of research findings are a part be included in district staff development programs. Teachers should be involved in the design, development, and implementation of any research efforts in the school district (60).

Research and experience suggest that staff development workshops are likely to produce successful outcomes when:

1. They are conducted by on-site personnel.
2. Goals and objectives are both limited and clear.
3. The treatment is short and the rewards of change are immediate.
4. Tangible contributions are elicited from all participants.
5. Some type of formative evaluation is conducted.
6. The program is sufficiently flexible to accommodate necessary or desirable modification.
7. Processes and products are directly applicable to participants' work.
8. The short-term program is placed in the context of long-range goals.

References

1. Bailey, Gerald Douglass. "Teacher Self-Assessment: In Search of a Philosophical Foundation." NASSP Bulletin, December, 1978, pp. 64-70.

2. Becker, Howard S. Sociological Work: Method and Substance. Chicago: Aldine Publishing Company, 1970.

3. Berry, Mary F. "Student Competency Testing." High School Journal, January, 1979, pp. 166-72.

4. Bracey, Gerald W. "Some Reservations About Minimum Competency Testing." Phi Delta Kappan, April, 1978, pp. 549-52.

5. Brickell, Henry M. "Seven Key Notes on Minimum Competency Testing." Phi Delta Kappan, May, 1978, pp. 589-92.

6. Brunner, Joseph F. and Campbell, John J. Participating in Secondary Reading: A Practical Approach. Englewood Cliffs, N.J.: Prentice-Hall, 1978.

7. Burns, Constance. "How Can We Give Teachers Better Preparation for the Teaching of Reading?" Reading in Action, IRA Conference Proceedings, Volume 2, 1957, pp. 51-53.

8. Carroll, John B. "Defining Language Comprehension." In Language Comprehension and the Acquisition of Knowledge. Washington, D.C.: V. H. Winston and Sons, 1972.

9. Caskey, Helen J. "Guidelines for Teaching Comprehension." The Reading Teacher, April, 1970, pp. 649-69.

10. Cohn, Marvin L. "Structured Comprehension." The Reading Teacher, February, 1969, pp. 440-444; 489.

11. Cook, W. C. Adult Literacy Education in the United States. Newark, Delaware: International Reading Association, 1977.

12. Cunningham, Patricia M. "Teaching Vocabulary in the Content Areas." NASSP Bulletin, February, 1979, pp. 112-116.

13. Dillon, J. T. "Alternatives to Questioning." High School Journal, February, 1979, pp. 217-222.

14. Dunn-Rankin, Peter. "The Visual Characteristics of Words." Scientific American, January, 1978: pp. 122-130.

15. Dupuis, Mary M. and Askov, Eunice N. "Content Area Differences in Attitudes Toward Teaching Reading." High School Journal, November, 1978, pp. 83-88.

16. Early, Margaret. "Important Research in Reading and Writing." Phi Delta Kappan, January, 1976, pp. 298-301.

17. Findley, Jim. "Westsides's Minimum Competency Graduation Requirements: A Program That Works." Phi Delta Kappan, May, 1978, pp. 614-18.

18. Gerber, John C. "Suggestions for a Commonsense Reform of the English Curriculum." College Composition and Communication, pp. 312-316.

19. Glasser, William. Schools Without Failure. New York: Harper and Row, 1969.

20. Gray, William S. "Basic Competencies in Efficient Reading." in Reading in an Age of Mass Communication. New York: Appleton-Century-Crofts, Inc., 1949, pp. 58-74.

21. Gross, Neal, et al. Implementing Organizational Innovations: A Sociological Analysis of Planned Change in Schools. New York: Basic Books, Incorporated, 1971.

22. Hanford, George H. in an interview in "Education Update" Issue #1, Winter, 1978 from Scholastic.

23. Hanyes, Elizabeth. "Using Research in Preparing to Teach Writing." English Journal, January, 1978.

24. Harker, W. John, ed. Classroom Strategies for Secondary Reading. Newark, Delaware: IRA, 1977.

25. Hobart, Thomas Y. "President's Perspective." New York State Teacher, April, 1979.

26. Jackson, Mark D. and McClelland, James L. "Sensory and Cognitive Determinants of Reading Speed." Journal of Verbal Learning and Verbal Behavior, #14, 1975, pp. 565-74.

27. Karlin, Robert. "Research in Reading." Elementary English, March, 1960, pp. 177-83.

28. Keefe, James W., ed. Competency Tests and Graduation Requirements, Second Edition. Reston Virginia: NASSP, 1979.

29. Kozuch, Joyce A. "Implementing an Educational Innovation: The Constraints of the School Setting." High School Journal, February, 1979, pp. 223-31.

30. Larsen, J. J. et al. "Trends in College Freshman Reading Ability." Journal of Reading, February, 1976, pp. 367-69.

31. Lowe, Lee Frank. "Writers on Learning How to Write." English Journal, October, 1964, pp. 488-95.

32. McClung, Merle Steven. "Lawyers, Courts, and Educational Policy...." High School Journal, March, 1979, pp. 243-51.

33. McCormack, Patricia, UPI Education Editor, in "Education Today," UPI column.

34. Mahoney, Joseph E. "Improving Reading Skills in Social Studies." How to Do it Series, Series 2, No. 1. Washington, D.C.: National Council for the Social Studies, 1977.

35. Moffet, James. Teaching the Universe of Discourse. Boston: Houghton-Mifflin, 1968.

36. Moray, Geraldine. "Intermediate Grades: Crucial Years in the Reading Development of Children." Reading Improvement, pp. 228-32.

37. Newman, Arthur J. "Some Fundamental Oversights." NASSP Bulletin, October, 1978, pp. 12-19.

38. Ossburn, Bess. "So You Teach in a Content Area." Today's Education, November-December, 1978, pp. 36-38.

39. Pooley, Robert C. "Distribution of Responsibility for the Reading Program." in Reading in an Age of Mass Communication. New York: Appleton-Century-Crofts, Inc., 1949, pp. 95-108.

40. Powell, William R. "The Effective Reading Teacher." The Reading Teacher, April, 1972, pp. 602-07.

41. Purves, Alan C. "What is Being Achieved in Reading and Writing." New York University Education Quarterly, Winter, 1978, pp. 8-13.

42. Quattrini, Joseph A. "New York's Students Do Outperform Others." Amsterdam Recorder, April 6, 1977.

43. Rosenblatt, Louise M. "The Poem as Event." College English, November, 1964, pp. 123-25.

44. Rosenshine, Barak and Furst, Norma. "Research on Teacher Performance Criteria," from Research in Teacher Education. Prentice-Hall, 1971.

45. Sack, Allan. "Notetaking As An Extension of Comprehension." Reading World, May, 1974, pp. 281-306.

46. Shepard, David L. "Content Area Reading." Paper presented at meeting of California Reading Association, November, 1977.

47. Skartvedt, Dan, AP writer. "Disaster Seen in Education." AP column, 1977.

48. Smith, Helen K. "The Responses of Good and Poor Readers When Asked to Read for Different Purposes." Reading Research Quarterly, 1963, pp. 53-83.

49. Sternglass, Maralyn S. "Composition Teacher as Reading Teacher." College Composition and Communication, pp. 378-382.

50. Stufflebeam, Daniel L. "The Use and Abuse of Evaluation in Title III." Theory Into Practice, 6 (June), pp. 126-33.

51. Tierney, Robert J. "Con: Minimum Competency Testing Won't Do It." Journal of Reading, October, 1978, pp. 10-12.

52. Ulin, Richard O. "For the Sake of Teaching Writing, Deliver Us From Traditional Grammar." High School Journal, November, 1978, pp. 58-68.

53. Wheeler, Fred "An Experimental Study of Means to Improve Writing." Journal of Secondary Education, November, 1965, pp. 331-35.

54. Wiley, D. E. and Harnischfeger, Annegret. Achievement Test Score Decline: Do We Need to Worry? Chicago: CEMREL, 1975.

55. Wise, Arthur E. "Minimum Competency Testing: Another Case of Hyper-Rationalization." Phi Delta Kappan, May, 1978, pp. 596-98.

56. Young, Edith M. and Rodenborn, Leo V. "Improving Communication Skills in Vocational Courses." Journal of Reading, February, 1976, pp. 373-77.

57. _____"It Bears Repeating." High School Journal, November, 1978, pp. 97-99.

58. _____"Dollars and Sense." Moneysworth Magazine, May, 1979.

59. _____"Five New York State Students in Top Ten Westinghouse Winners." New York State Teacher, March 11, 1979.

60. _____"United Teachers' Position Paper on In-service Education." New York State Teacher, June 24, 1979.

61. _____"Degrees of Reading Power." The University of the State of New York, Division of Educational Testing, Albany, 1977.

62. _____ Reading in Secondary Schools. The University of the State of New York, Bureau of Secondary Curriculum Development, Albany, 1965.

63. _____ Test Development Notebook, forms 082, 81, supplement to 81, 84, supplement to 84, 84, supplement to 85, 86, and supplement to 86. The University of the State of New York, Divisions of Research and Evaluation, Albany, 1976-78.

Appendix A

The purpose of this survey is to gather information of two types:

1. the degree of importance of various reading skills in different subject areas

2. the extent of teacher training (from teacher-education courses) in the direct instruction of these skills.

Each item on the survey has two response scales. The first asks you to assess and indicate the relative importance of the skill to reading and learning in your subject area.

The second scale asks you to assess and indicate the extent of your previous training in methods of instruction of the skill.

Make responses to each item by circling one number on each of the two scales.

Example:

Identifying main ideas and supporting details.

(For a student, this skill is)	(You are)
very important(5 4 3 2 1)unimportant (to learning in your subject area)	highly trained(5 4 3 2 1)not trained (in direct instruction of the skill.)

1. Knowing meanings of special vocabulary and morphemes(ultra, graph) found in print materials in the subject area.
very important(5 4 3 2 1)unimportant highly trained(5 4 3 2 1)not trained

2. Using context clues and key words to determine meaning.
very important(5 4 3 2 1)unimportant highly trained(5 4 3 2 1)not trained

3. Identifying main ideas and supporting details.
very important(5 4 3 2 1)unimportant highly trained(5 4 3 2 1)not trained

4. Locating information by using book parts such as the index, glossary, etc.
very important(5 4 3 2 1)unimportant highly trained(5 4 3 2 1)not trained

5. Locating information by using reference books and materials.
very important(5 4 3 2 1)unimportant highly trained(5 4 3 2 1)not trained

6. Paraphrasing and summarizing.
very important(5 4 3 2 1)unimportant highly trained(5 4 3 2 1)not trained

7. Locating and interpreting information on maps, graphs, charts, tables.
very important(5 4 3 2 1)unimportant highly trained(5 4 3 2 1)not trained

8. Following directions.
very important(5 4 3 2 1)unimportant highly trained(5 4 3 2 1)not trained

9. Classifying and categorizing.
very important(5 4 3 2 1)unimportant highly trained(5 4 3 2 1)not trained

10. Comparing and Contrasting.
very important(5 4 3 2 1)unimportant highly trained(5 4 3 2 1)not trained

11. Using causal reasoning to predict outcomes and trace causes.
very important(5 4 3 2 1)unimportant highly trained(5 4 3 2 1)not trained

12. Making inferences and drawing conclusions and analogies.
very important(5 4 3 2 1)unimportant highly trained(5 4 3 2 1)not trained

13. Outlining information by order of time, importance, increasing abstraction.
very important(5 4 3 2 1)unimportant highly trained(5 4 3 2 1)not trained

14. Distinguishing between fact and opinion, detecting propaganda,bias,slant.
very important(5 4 3 2 1)unimportant highly trained(5 4 3 2 1)not trained

15. Determining author's tone, attitude, purpose.
very important(5 4 3 2 1)unimportant highly trained(5 4 3 2 1)not trained

16. Weighing and critically evaluating the evidence in support of an argument, inference, conclusion.
very important(5 4 3 2 1)unimportant highly trained(5 4 3 2 1)not trained

17. Determining the structure of the writing: narrative, opinion-reason, how-to, news, etc.
very important(5 4 3 2 1)unimportant highly trained(5 4 3 2 1)not trained

Your subject area_____

HELP, please. I need examples of reading problems you have observed in your students. In return, I will try to give you some workable strategies to help you to help them with those problems.

I need any or all of the following:

1. your observations of the reading abilities of your students in general.

2. specific examples of how a reading problem led to low achievement or failure in an assignment, test, or other task.

3. any statistics or other documentation showing poor or decreased (declining) reading ability in individuals or in classes.

Appendix B

Materials Survey

Please indicate if you have used any materials from science or social studies courses to teach communication skills in your classroom this year. After scanning the items on the list, indicate by checkmarks the content area(s) of materials used and the frequency of use for each.

	Materials	Areas		Frequency (times per year)				
		Sci	SS	0	1-2	3-5	6-9	10+
1.	textbooks							
2.	books of readings							
3.	magazine articles							
4.	newspaper articles							
5.	review books							
6.	reference books							
7.	reading lists							
8.	course outlines							
9.	tests or test questions							
10.	worksheets or assignments							
11.	lists of terms							
12.	manuals or directions							
13.	experiments, studies, surveys							
14.	puzzles, games, simulations							
15.	maps, graphs, tables, charts							
16.	diagrams or cartoons							
17.	scripts from AV software							
18.	others (specify) _____							
19.	others _____							
20.	others _____							

1. An English teacher is preparing a lesson on the four modes of writing: descriptive, narrative, expository, and argumentative. Four selections from a book of readings used as a social studies text will be used as the basis for the lesson. Comparisons will be drawn with respect to word choice, structure and organization, and tone and attitude. Special attention will be paid to methods of paragraph development in writing in social studies.

This plan seems...

very practical(5 4 3 2 1)impractical very desirable(5 4 3 2 1)undesirable

In implementing such a plan at this time, you would be...

highly skilled(5 4 3 2 1)not skilled

2. A reading teacher was referred a student who has difficulty reading scientific nonfiction but is otherwise an average reader. The teacher will first assess the readability of the student's science text, and will then prepare cloze exercises from the text for diagnosis of the student's problem. Analysis of technical terms, key words, and methods of paragraph development in scientific writing will be conducted using passages from the text.

This plan seems...

very practical(5 4 3 2 1)impractical very desirable(5 4 3 2 1)undesirable

In implementing such a plan at this time, you would be...

highly skilled(5 4 3 2 1)not skilled

3. An English teacher is preparing to teach a unit on semantics based on a chapter in a text. Three groups of students are given the same pages to read but three different purposes for reading and three different writing assignments:

A. Poorer readers are given statements at the literal level of comprehension. They are asked to verify by finding support or no support for the statements in the assigned pages.

B. Average readers are given statements at the inferential level of comprehension. They are asked to find support or no support for the inferences by citing details from the assigned pages.

C. Better readers are given questions at the evaluative level of comprehension. Such factors as tone and attitude, objectivity, organization, and evidence must be considered in finding answers within the assigned pages.

This plan seems...

very practical(5 4 3 2 1)impractical very desirable(5 4 3 2 1)undesirable

In implementing such a plan at this time, you would be...

highly skilled(5 4 3 2 1)not skilled

1. A. In a sentence or two, explain the theory of reading comprehension behind the Regents Competency Test in Reading.

_____

_____

_____

B. Suggest two specific instructional strategies which might lead to improved student performance on the test:

1. _____

_____

2. _____

_____

2. Briefly explain the relationships among the following terms, according to the Sack-Yourman model of reading comprehension:

Detail, Conclusion, Generalization, Application, Significance, and Subject Matter.

_____

_____

_____

_____

3. List five or more variables which determine the degree of reading difficulty of a prose passage:

A. _____

B. _____

C. _____

D. _____

E. _____

F. _____

G. _____

4. Two students in a class read the text at different rates. Although both students are of average intelligence, one reads at an average rate and the other is 50% faster, with approximately equal comprehension. What factors or characteristics might separate fast readers from average readers?

5. What two courses presently offered in our high school are most likely to be effective in training students in critical thinking in all areas? Why these courses?

A.

B.

6. If a science or social studies teacher came to you for help or advice about reading difficulties his students were experiencing with a text, what concrete recommendations would you be likely to make?

7. Assumptions underlie instruction: e.g., speed drills increase typing proficiency. Identify three to five basic assumptions about the processes of language acquisition which underlie your practices in reading instruction. For each, indicate the source for that assumption.

A.

7. B. _____

_____

_____

C. _____

_____

_____

D. _____

_____

_____

E. _____

_____

_____

Appendix C

Overview

Meeting	Time	Procedures	Materials
1st	1 hr.	1. Overview 2. Pre-test	1. Overview 2. Materials survey 3. Situations survey 4. Pre-test
2nd	1 hr.	1. Orientation to materials package 2. lesson plan instructions 3. Discussion	1. Assumptions from research 2. Difficulty variables 3. Sack-Yourman model(45) 4. Orders of comprehension (20) 5. Free responses to reading (43) 6. Directed reading activity (34) 7. Understanding structure (46) 8. Content patterns (46) 9. Science & history skills (62) 10. Levels of questioning (24) 11. Content area suggestions (38) 12. Whole powers of comprehension(61) 13. Alternatives to questioning (13) 14. Research summary (23) 15. Fry graph (6) 16. Textbooks 17. Instructions and objective
3rd and 4th	2 hrs.	1..Application of theory to practice 2. Discussion of grouping procedures for specific courses or classes 3. Questions	1. - 17. above
Final	6 hrs.	1. Presentation of lessons 2. Discussion and suggestions for assignments in writing 3. Discussion of application during next school year 4. Cloze demonstration 5. Post-test 6. Comments, suggestions, complaints, etc.	1. 1. - 17. above 2. Teacher-designed lesson plan 3. Cloze materials 4. Materials survey 5. Situations survey 6. Post-test

88

Objective

Using the resource materials and a short section of a 10th-grade social studies or biology textbook, the teacher will prepare a written outline and a ten-minute oral presentation of a reading lesson which includes the following:

1. a statement of objectives, in terms of student performance.

2. an assessment of the readability of the text.

3. an analysis of passage structure (see 88 Passages).

4. a determination of the content-area reading skills required (see 7. - 9.).

5. an outline of instructional strategies or procedures.

6. pre-reading, discussion, and post-reading statements and/or questions.

7. methods of evaluation of student performance.

8. follow-up activities in writing, further reading, or other areas.